CLAIM AMENDMENTS

IN THE CLAIMS

This listing of the claims will replace all prior versions, and listing, of claims in the application or previous response to office action:

1. **(Cancelled)**

2. **(Currently Amended)** A method according to claim ~~1~~3, wherein the end position of the measuring window is placed immediately before a start of combustion of a following injection pulse.

3. **(Currently Amended)** A method for analyzing a combustion noise during the injection of fuel into a cylinder of an internal combustion engine, comprising:

detecting the combustion noise within an injection cycle in a measuring window which corresponds to a rotation angle of a crankshaft of the internal combustion engine,

wherein an algorithm is formed by means of which a start and/or end position of the measuring window that is variable as a function of operating parameters is determined for the measuring window in order to register the combustion noise of an individual injection pulse~~A method according to claim 1~~, wherein the start position of the measuring window is predefined by a fixed length in time or a fixed rotation angle which is counted back from the end position of the measuring window.

4. (Cancelled)

5. **(Currently Amended)** A method according to claim 1, wherein ~~the start position and/or~~ a length of the measuring window is determined by analysis of an envelope which is formed from the received combustion noise.

6. (Previously Presented) A method according to claim 5, wherein at least one local minimum value is determined by low pass filtering from the envelope which is established over two adjacent injection pulses, a position of said local minimum value being used as the start position for the measuring window.

7. **(Currently Amended)** A method for analyzing a combustion noise during the injection of fuel into a cylinder of an internal combustion engine, comprising:

detecting the combustion noise within an injection cycle in a measuring window which corresponds to a rotation angle of a crankshaft of the internal combustion engine,

wherein an algorithm is formed by means of which a start and/or end position of the measuring window that is variable as a function of operating parameters is determined for the measuring window in order to register the combustion noise of an individual injection pulse ~~A method according to claim 5~~, wherein the start position and/or a length of the measuring window is determined by analysis of an envelope which is formed from the received combustion noise, and wherein if there are a number of local minimum values a smallest minimum value is used as the start position for the measuring window.

8. **(Currently Amended)** A method for analyzing a combustion noise during the injection of fuel into a cylinder of an internal combustion engine, comprising:

detecting the combustion noise within an injection cycle in a measuring window which corresponds to a rotation angle of a crankshaft of the internal combustion engine,

wherein an algorithm is formed by means of which a start and/or end position of the measuring window that is variable as a function of operating parameters is determined for the measuring window in order to register the combustion noise of an individual injection pulse ~~A method according to claim 1~~, wherein, taking into account an ignition delay and/or an engine type, the measuring window is positioned in an interval ±[[+-]]4 ° crankshaft angle with regard to the start of the combustion noise.

9. **(Currently Amended)** A device for analyzing the combustion noise during an injection of fuel into a cylinder of an internal combustion engine comprising: a knock sensor for recording the combustion noise having an angle sensor for recording the rotation angle of a crankshaft of the internal combustion engine, and

a control device comprising a software program with an algorithm, the software program when executed specifying a start and/or end position of a measuring window for an individual combustion noise that is to be recorded, said start and/or end position being variable as a function of operating conditions, wherein the start position of the measuring window is predefined by a fixed length in time or a fixed rotation angle which is counted back from the end position of the measuring window.

10. **(Currently Amended)** A device according to claim ~~9~~12, wherein the control device is embodied to quantify an injected amount of fuel from the amplitude or the intensity of the combustion noise.

11. **(Currently Amended)** A device according to claim ~~9~~12, wherein the control device records the combustion noise on a directly injecting diesel or petrol engine.

12. **(Currently Amended)** A method for analyzing a combustion noise during the injection of fuel into a cylinder of an internal combustion engine, comprising:

detecting the combustion noise within an injection cycle in a measuring window which corresponds to a rotation angle of a crankshaft of the internal combustion engine,

wherein an algorithm is formed by means of which a start and/or end position of the measuring window that is variable as a function of operating parameters is determined for the measuring window in order to register the combustion noise of an individual injection pulse, wherein the start position and/or a length of the measuring window is determined by analysis of an envelope which is formed from the received combustion noise. ~~A method according to claim 5~~, and wherein at least one local minimum value is determined by low pass filtering from the envelope which is established over a pre-injection and a main injection, a position of said local minimum value being used as the start position for the measuring window.

13. **(Currently Amended)** A method for analyzing a combustion noise during the injection of fuel into a cylinder of an internal combustion engine, comprising:

determining a start and/or end position of a measuring window that is variable as a function of operating parameters for the measuring window, ~~and~~

detecting the combustion noise within an injection cycle in the measuring window which corresponds to a rotation angle of a crankshaft of the internal combustion engine,

wherein the start position of the measuring window is predefined by a fixed length in time or a fixed rotation angle which is counted back from the end position of the measuring window.

14. (Previously Presented) A method according to claim 13, wherein the end position of the measuring window is placed immediately before a start of combustion of a following injection pulse.

15-16. **(Cancelled)**

17. **(Currently Amended)** A method according to claim 13, wherein ~~the start position and/or~~ a length of the measuring window is determined by analysis of an envelope which is formed from the received combustion noise.

18. (Previously Presented) A method according to claim 17, wherein at least one local minimum value is determined by low pass filtering from the envelope which is established over two adjacent injection pulses, a position of said local minimum value being used as the start position for the measuring window.

19. **(Currently Amended)** A method for analyzing a combustion noise during the injection of fuel into a cylinder of an internal combustion engine, comprising:

determining a start and/or end position of a measuring window that is variable as a function of operating parameters for the measuring window,

detecting the combustion noise within an injection cycle in the measuring window which corresponds to a rotation angle of a crankshaft of the internal combustion engine, wherein the start position and/or a length of the measuring window is determined by analysis of an envelope which is formed from the received combustion noise~~A method according to claim 17~~, wherein if there are a number of local minimum values a smallest minimum value is used as the start position for the measuring window.

20. **(Currently Amended)** A method for analyzing a combustion noise during the injection of fuel into a cylinder of an internal combustion engine, comprising:

determining a start and/or end position of a measuring window that is variable as a function of operating parameters for the measuring window, and

detecting the combustion noise within an injection cycle in the measuring window which corresponds to a rotation angle of a crankshaft of the internal combustion engine~~A method according to claim 13~~, wherein, taking into account an ignition delay and/or an engine type, the measuring window is positioned in an interval ±4 ° crankshaft angle with regard to the start of the combustion noise.